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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,985	02/20/2002	Valerio Aisa	108041-0009	2687

7590 03/04/2004  
Cesari & McKenna  
30 Rowes Wharf  
Boston, MA 02210

EXAMINER

LIEU, JULIE BICHNGOC

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 03/04/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/049,985

Applicant(s)

AISA, VALERIO

Examiner

Julie Lieu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 7,8,14-20,25,31-34 and 36-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-12,21-23,26-30,35 and 46 is/are rejected.
- 7) ☒ Claim(s) 13 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 7, 8, 14-20, 25, 31-34, and 36-45 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim can not be dependent on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, claims 7, 8, 14-20, 25, 31-34, and 36-45 have not been further treated on the merits.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. Claims 1-6, 9-12, 21-23, 26-30, 35, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable by Ciancimino et al. (US Patent Application No. 2002/0035757) in view of Carr et al. (US Patent No. 4,644,320) (cited by the applicant).

Claim 1:

Ciancimino et al. discloses a device for monitoring a household electric user, in particular a household appliance 20, presenting an electric load, wherein the monitoring device, the monitoring device comprising measuring means for detecting the quantity of electric power or current absorbed by the user, characterized in that the monitoring device comprises control means 66 which are programmed for:

- a. Comparing the absorption of electric power current through said measuring means with reference values of electric power or current, which are stored within the control means (para. 0026-0027)
- b. Generating, in function of the comparison, information which being representative of the present status or phase of operation of the electric user
- c. Allowing the information to be read from outside the device (para. 0034)

The reference fails to disclose the monitoring device is connected between the source of electrical energy and the electric load. Nonetheless, it would have been obvious to one skilled in the art to readily recognize using monitoring device connected between the power line and the appliance to monitor the power absorption of the appliance (col. 7, last para.) In light of this teaching, it would have been obvious to one skilled in the art to apply the concept taught in Carr in the system of Ciancimino because it is old and conventional in the art.

Claim 2:

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The control means are further program for generating, in function of the comparison, information being representative of the efficiency or performance status of the electric user.

Claim 3:

The information generated in Ciancimino is for estimating the unbalance of the machine, which is a wear status of the machine.

Claim 4:

The control means comprise memory means containing reference data or profiles, being representative of a theoretical level of absorption of electric power or current that the electric user would determine under normal and correct operating conditions. (para. 0027 and 0028).

Claim 5:

The control means 66 comprise processing means for comparing the result of the measurement performed by the measuring means with the reference data or profiles.

Claim 6:

The control 66 is inherently programmed for generating on the basis of the comparison the information to be displayed to users (para. 0034).

Claim 9:

In the combined system of Ciancimino and Carr, the control means comprises interface means for connecting the device to a communication bus, which is the power line, the control means being programmed for making at least part of the information available to the bus.

Claim 10:

The combined system is connected to an external apparatus, but it is not clear whether it is particularly a personal computer. Nonetheless, it is conventional to connect a monitoring

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system to a personal computer. Therefore, one skilled in the art would connect this combined monitoring system to a personal computer because it would provide easy means for monitoring the condition of the device by a user.

Claim 11:

Ciancimino disclose terminating the operation of the device when the unbalance condition occurs. Para. 0034. It is not clear whether a normally closed relay is used. However, the use of a normally closed relay to control terminate the operation of a device upon detection of a fault or abnormal condition is very conventional in the art as taught by Carr (see col. 5, lines 37-51). Therefore, it would have been obvious to one skilled in the art to use a normally closed relay in the system of Ciancimino because it would serve the purpose suggested in Ciancimino.

Claim 12:

In the combined system, the switching is realized when the appliance is determined to be unbalanced and instructions are received through the communication bus.

Claim 15:

Though manual control is not disclosed in either of the references, it would have been obvious to one skilled in the art to use a manual control in this combined system because manual control should be available for control of a device in case the automatic control fails.

Claim 21:

The rejection of claim 21 recites the rejection of claims 1-3, except it is a method claim

Claim 22:

In Ciancimino, the absorption is measured instant by instant, in particular for determining an absorption profile which expressed the evolution time of real level of absorption. That is

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energy is calculate as the evolution time of real level of current absorbed by the machine. Para. 0027 and 0034.

Claim 23:

The system in Ciancimino consists of a reference absorption profiles, which is representative of the evolution in time of a theoretical level of absorption of electric power or current that the machine would produce under its normal and correct operating conditions.

Claims 27 and 28:

The information provided in Ciancimino is of the diagnostic type and wear status, that is, the machine is unbalanced, as a result of wearing.

Claim 29:

The storage of the information of the diagnostic type and/or the information of statistical is provided in Ciancimino.

Claim 30:

The information of statistical type are determined in function of the storage and the relevant update in time of the information of the functional type.

Claim 35:

In presence of the information of the diagnostic type, efficiency of the device, the activation of a visual or audible signal for a user is provided.

Claim 46:

The rejection of claim 46 recites what was discussed in the rejection of claim 1-3.

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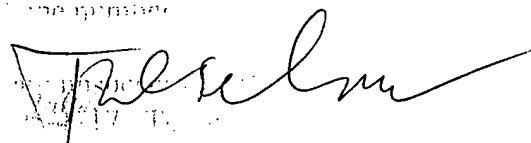
***Allowable Subject Matter***

4. Claims 13 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 703-308-6738. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Hofsass can be reached on 703-305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Julie Lieu  
Primary Examiner  
Art Unit 2636

Feb. 27, 04